REMARKS

Claims 21-25, 27-36, 45 and 46 remain pending. Claim 45, indicated to be allowable, has been rewritten in independent form. Claim 45 and its dependent claim 46 are therefore now believed to be in allowable form. Formal corrections have also been made to dependent claims 28 and 29. The withdrawn claims 47-54 are being cancelled, without prejudice to presenting them in a divisional application.

The rejection of claims 21, 28, 30, 31 and 35 under 35 U.S.C. §102(b) on the ground that they are anticipated by United States patent no. 5,969,639 of Lauf et al. (hereinafter "Lauf") is respectfully traversed. Lauf does not disclose, suggest or inherently require a sensing substrate and a separate electronics module that are connected together by flexible leads in order to allow relative movement between them.

The Office Action (para. 2(a), page 2) apparently concedes that Lauf does not describe the use of flexible leads between its temperature sensors and electronics circuitry but contends that Lauf's device must have flexible leads to allow use of a "moveable detector," primarily referencing col. 5, lines 45-50 of Lauf. But the "moveable detector" of this cited passage has a function of monitoring a plurality of LEDs on the wafer of Example 3 (Lauf, col. 5, lines 24-43) to detect the signals being transmitted by the LEDs. The use of either multiple fixed detectors or one detector that is moved to sequentially receive signals from the fixed pattern of LEDs are described. They detect IR signal transmissions from the wafer rather than being part of the wafer. The wireless communication allows the wafer to take measurements while it is being rotated (see Lauf, col. 4, lines 18-22 and col. 5, lines 36-43), for example, where wire connections are difficult to make.

The "moveable detector" described by Lauf in the cited passage in col. 5, lines 45-50 is not one of its sensors 720 that is connected to a lead 740, contrary to what is assumed in paragraph 2(a) of the Office Action. It is something additional that is used to receive, through IR signal transmission from LEDs on the wafer, signals of measurements made by the sensors 740. This is respectfully submitted to be how one of ordinary skill would have read Examples 3 and 4 of Lauf's column 5.

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That the cited Lauf passage of column 5 describes receiving IR transmissions from the wafer appears to be acknowledged by the Office Action (para. 8(b), page 11) in its rejection of dependent claim 31.

Further, even if the leads 740 were flexible, for the purpose of argument, it is not understood how this would have suggested relative movement between the wafer 710 and the signal conditioning circuit 730. The Office Action (para. 2(a)) appears to equate the moveable detector with one of the sensors 720, so a reason for the hypothetical flexible leads 740 would be to allow movement of the "moveable detector." Movement of the signal conditioning circuit 730 would not be necessary or suggested thereby. It is respectfully submitted that one of ordinary skill could not have possibly read Examples 3 and 4 of Lauf's column 5 to suggest the signal conditioning circuit 730 to be separate from the wafer with the sensors 720, let alone that they are connected together by flexible leads.

The Office Action also contends, in paragraph 8(a) on pages 10 and 11, that this combination is described in Lauf's column 3, lines 45-61. But nothing specific is pointed out in this passage to suggest that the electronics circuit 730 is separate from the wafer, or that they are connected by flexible leads. Only a general allegation is made that this passage describes this. But it is there stated that "all signal measurement and conditioning circuits are integrated onto an 8" wafer 710." This is directly opposed to the allegation in the Office Action that the signal conditioning circuit 730 is separate from the wafer 710. Examples are further given in the cited passage of the array of sensors 720 being "mounted on the wafer 710" and that the sensors 720 and transmitter 750 "compose a set of integrated circuits disposed directly upon the substrate 710." It is therefore respectfully submitted that the passage in Lauf's column 3, lines 45-61 clearly describes mounting the signal conditioning circuit on the wafer 710 and could not possibly have suggested to one of ordinary skill that the signal conditioning circuit 730 could be separate from the wafer 710, let alone that they are connected together by flexible leads.

With respect to dependent claim 31, Lauf describes an RF receiver of instructions from an external transmitter to control operation of the device (Lauf, col. 3, line 66 – col. 4, line 2) but the IR structure is described in the passage cited in the Office Action (Lauf, col. 5, lines 25-55) to only <u>send</u> signals from the sensors. It is respectfully submitted that claim 31 is therefore novel over Lauf for the additional reason that an IR transceiver both sends and receives IR signals.

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For these reasons, it is respectfully submitted that claim 21 and its dependent claims 28, 30, 31 and 35 are novel over Lauf and therefore patentable.

With regard to the numerous rejections under 35 U.S.C. §103(a) of other claims that depend from claim 21 over various combinations of Lauf and other references, it is respectfully submitted that these other claims 22-25, 27, 29, 32-34 and 36 are patentable for the reasons set forth above. None of these other references is seen to suggest the differences described above of independent claim 21 over Lauf and the Office Action does not contend otherwise. The right is reserved, however, to present further arguments of the patentability of these other claims over all the cited references if that ever becomes necessary.

New independent claim 55 and dependent claims 56-69 are being added by this Amendment. Claim 55 is directed to the same subject matter as allowable claim 45 but with other limitations believed unnecessary to define this concept being modified or eliminated. Claims 55-69 are therefore submitted to be patentable for the same reasons as claims 45 and 46.

Information Disclosure Statement

It is noted that the Examiner has considered all references submitted in Information Disclosure Statements dated July 21, 2004 and July 14, 2006. However, references submitted in Supplemental Information Disclosure Statements dated July 22, 2004 and July 23, 2004 remain unacknowledged. It is respectfully requested that the references identified in these Supplemental Information Disclosure Statements be considered and the PTO Forms 1449 submitted therewith be initialed and returned with the next Action.

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Conclusion

Accordingly, it is believed that this application is now in condition for allowance and an early indication of its allowance is solicited. However, if the Examiner has any further matters that need to be resolved, a telephone call to the undersigned at 415-276-6534 would be appreciated.

Respectfully submitted,

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